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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/759,219	01/16/2001	Shinya-Muraoka	Q62673	9948

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SUGHRUE, MION, ZINN, MACPEAK & SEAS
2100 PENNSYLVANIA AVENUE, N.W.
WASHINGTON, DC 20037

EXAMINER	
KADING, JOSHUA A	
ART UNIT	PAPER NUMBER
2661	

DATE MAILED: 12/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/759,219	Applicant(s) MURAOKA, SHINYA	
	Examiner Joshua Kading	Art Unit 2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4 and 5 is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) 2 and 3 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

5 (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10 Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art (AAPA) in view of Ziporovich (U.S. Patent 5,886,842).

Regarding claim 1, AAPA discloses "DC-offset eliminating method for a receiving circuit of a receiver which receives signals comprising a plurality of frames continuously
15 sent to the receiving circuit, each of the frames has a preamble portion added only at the head of each frame, wherein the method comprises: calculating a DC-offset component depending upon the received signals (page 3, lines 3-5 of the specification); subtracting said DC-offset component from the received signals (page 3, lines 3-8 of the specification); and performing a DC-offset eliminating operation based on the subtracted
20 result (page 3, lines 3-8 of the specification), wherein a DC offset follow-up speed is reduced...(page 3, lines 11-24 of the specification)..."

However, AAPA lacks what Ziporovich discloses, "...when said preamble portion is being received, regardless of a time when a continuous reception is performed in which all of said frames are received to recognize the timing of the frame number to be
25 received or a time when an intermittent reception is executed in which only a frame destined for said receiver itself is received (col. 6, lines 9-21)."

It would have been obvious to one with ordinary skill in the art at the time of invention to include the "follow-up speed" changed "with respect to the DC offset when said preamble portion is being received" with the rest of the method for the purpose of finding an appropriate DC correction value prior to the reading of the user data

5 (Ziporovich, col. 6, lines 21-24). The motivation being that knowing the appropriate correction value prior to the reading of the user data allows all of the data to be properly decoded because the "learning curve" to find the offset happened during the preamble not the data.

10

Allowable Subject Matter

Claims 2 and 3 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject
15 matter: Claims 4 and 5 are allowable because the prior art fails to teach, in combination with other claim limitations, "an AND circuit for performing logical AND operation on said received frame signal input from said control circuit and said frame-continuation detection signal input from said signal-end detecting circuit, characterized in that: said DC-offset eliminating circuit selects any one of said coefficients H and L depending
20 upon an output from said AND circuit."

Response to Arguments

The foreign priority documents will be appropriately acknowledged in the current Office Action. However, applicant references Japanese Patent Application No. 2000-007461 dated January 17, 2000. This is the incorrect Patent Application No. for the corresponding foreign reference and it is pointed out the correct Japanese Patent

5 Application No. is 2000-07641 dated January 17, 2000.

Applicant's arguments filed 26 July 2004 have been fully considered but they are not persuasive.

Applicant argues that Ziporovich does not disclose "the DC offset follow up speed
10 is changed (reduced)...upon receipt of a preamble." Further, applicant argues that "Ziporovich uses the preamble to adjust the DC offset in a control loop that includes shift registers that add preamble samples together to obtain a DC offset, which is contrary to the invention as recited in claim 1." The examiner respectfully disagrees.

Regarding the change in follow up speed, AAPA is used to read on the actual
15 reduction of the follow up speed (as above); what Ziporovich is used for is to read on the receipt of the preamble data and indicate a corresponding change. As read in col. 6, lines 10-13 during acquisition mode (i.e. during preamble receipt) there is such a change in the DC offset. Thus, AAPA in view of Ziporovich fully accounts for the invention of claim 1.

20 Further, although applicant may be correct that Ziporovich discloses a possible calculation of the DC offset through the use of shift registers and adding preamble samples, claim 1 makes no mention of how the DC offset is calculated. At most it

mentions that the DC offset is subtracted from the received signals, this is not the same as actually calculating the DC offset. In fact line 6 of claim 1 is the only place that makes reference to the actual calculation of the DC offset, makes no specific description of how the DC offset is calculated. Therefore, Ziporovich is an appropriate reference in combination with AAPA and fully reads on claim 1.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Kading whose telephone number is (571) 272-3070. The examiner can normally be reached on M-F: 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye can be reached on (571) 272-3078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

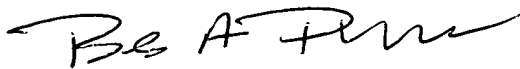
- 5 Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should
- 10 you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Joshua Kading
Examiner
Art Unit 2661

December 20, 2004

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BOB PHUNKULH
PRIMARY EXAMINER